

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:  
Christian Bonnet et al.

Serial No.: 10/628,153

Confirmation No.: 4378

Filed: July 28, 2003

For: BRAZED COPPER HEAT EXCHANGERS AND PROCESS FOR MANUFACTURING THEM BY WELDING

Group Art Unit: 1725

Examiner: Maria Alexandra Elve

MAIL STOP APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

## REPLY BRIEF

Applicants submit this Reply Brief to the Board of Patent Appeals and Interferences in response to Examiner's Answer dated October 1, 2007. While Applicants maintain each of the arguments submitted in Applicants' previously submitted Appeal Brief, Applicants make the following further arguments in light of the Examiner's Answer.

### **Status of Claims**

Claims 18, 20-39, 42 and 46-51 are pending in the application. Claims 1-17 were originally presented in the application. Claims 18-51 were added during prosecution. Claims 1-17, 19, 40, 41 and 43-45 have been canceled. Claims 48, 49 and 51 have been withdrawn from consideration. Claims 18, 20-39, 42, 46, 47 and 50 stand finally rejected as discussed below. The final rejections of claims 39, 42, 46 and 50 are appealed.

**Grounds of Rejection to be Reviewed on Appeal**

1. Rejection of claim 50 under 35 U.S.C. § 103(a) as being unpatentable over *Quaas* (USPN 3,392,017) in view of *Davidian et al.* (USPN 6,347,662, hereinafter *Davidian*).
2. Rejection of claims 39 and 42 under 35 U.S.C. § 103(a) as being unpatentable over of *Davidian* in view of either *Quaas* or *Clarke* (USPN 4,423,618) or *Harris* (USPAP 2003/0021717).
3. Rejection of claim 46 under 35 U.S.C. § 103(a) as being unpatentable over of *Davidian* in view of *Quaas*.

## ARGUMENTS

Applicant does not supplement arguments 1-3 presented in Applicant's previously filed Appeal Brief because the arguments have not changed.

In the Examiner's Answer, the Examiner introduces new evidence, namely specific pages from *Glossary of Metallurgical Terms and Engineering Tables*, American Society for Metals, Ohio (c) 1979 (hereinafter "glossary"). Applicant responds herein to the new evidence relied upon by the Examiner.

The Examiner submits definitions of brazing and welding from the glossary to assert that "low temperature welding" may encompass brazing. Applicant respectfully traverses the Examiner's assertion on grounds that the terms brazing and welding have different meanings in the art.

While Applicant concedes that definitions are sometimes generalized, and one definition may broadly encompass other processes, Applicant's recite and differentiate welding and brazing, or welded and brazed parts, throughout the instant specification and the claims. Therefore, proper claim construction requires that a difference in meaning between claim limitations directed to welding and those directed to brazing (or brazed elements) be appreciated.

Claim limitations are to be given their ordinary and customary meaning that the limitations would have to a person of ordinary skill in the art in question at the time of the invention, and the specification serves as the primary source for claim interpretation. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). The present application distinguishes between welding and brazing (See *e.g.*, Page 2, Lines 7-13, 15-25, 31-33; Page 5, Line 36-Page 6, Line 18). Therefore, Applicant submits that one of skill in the art would recognize the difference between welding and brazing when reading the instant specification.

Further, all claim terms are presumed to have meaning in a claim. *Innova/Pure Water, Inc. v. Safari Water Filt. Sys. Inc.*, 381 F.3d 1111, 72 USPQ2d 1001, 1007 (Fed.

Cir. 2004). Thus, Applicant's use of distinct terms in the claims requires that the terms welding and brazing have different meanings and are therefore distinct processes. For example, claim 18 recites a process for preparing a metal workpiece for arc welding, said process comprising depositing at least one layer of an alloy onto a matrix, wherein, *inter alia*, said matrix includes at least one brazed zone. Claim 29, which depends from claim 18, adds that the deposition of said layers comprises, *inter alia*, supplying and melting a copper/tin alloy via an electric arc. Claim 33 further limits claim 29 to a MIG or TIG welding torch. Additionally, claim 50 recites creation of a brazed zone as one method step and welding as another method step. To suggest that these distinct terms necessarily have the same meaning is contrary to well-established rules of claim construction.

Therefore, Applicant submits the terms welding and brazing are distinct processes, as defined by the instant specification and claims, notwithstanding the definitions in the glossary introduced by the Examiner. Applicant further submits that one of skill in the art of joining metals would not combine or replace a welding process with a brazing process, or vice versa, and would not be bound by a definition of either of the terms welding and brazing.

## CONCLUSION

The Examiner errs in finding that:

1. Claim 50 is unpatentable over *Quaas* in view of *Davidian*;
2. Claims 39 and 42 are unpatentable over of *Davidian* in view of either *Quaas* or *Clarke* or *Harris*; and
3. Claim 46 is unpatentable over of *Davidian* in view of *Quaas*.

Withdrawal of the rejections and allowance of claims 39, 42, 46 and 50 is respectfully requested.

Respectfully submitted, and  
S-signed pursuant to 37 CFR 1.4,  
/Gero G. McClellan, Reg. No. 44,227/

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